## **ABSTRACT**

A process is provided for forming a super absorbent composite for use in personal hygiene products, comprising a non-woven core with SAP uniformly distributed throughout the thickness of the core and bonded to the core with an adhesive. A non-woven core is provided to a processing line. An adhesive is introduced throughout the thickness of the core. Then the core is impregnated with a super absorbent polymer by blowing a stream of super absorbent polymer and air onto the core at a sufficiently high velocity to cause the super absorbent polymer to penetrate the surface of the core. The super absorbent polymer is distributed uniformly throughout the cross-section of the non-woven core and immobilized by the adhesive. Alternatively, the super absorbent polymer is blown into a non-woven core without adhesive and immobilized by a fiber matrix in the non-woven core.

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